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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,891	01/24/2005	Detlef Burgard	06915 USA	2886

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AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
7201 HAMILTON BOULEVARD
ALLENTOWN, PA 181951501

EXAMINER	
THOMAS, JAISON P	
ART UNIT	**PAPER NUMBER**
1751	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,891	BURGARD ET AL.	
	Examiner	Art Unit	
	Jaison P. Thomas	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-5,7,9 and 10* is/are rejected.

7)☐ Claim(s) *6 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 are pending. Claims 3-10 are new. Claims 1 and 2 are amended.

2. The objections to the Specification have been withdrawn in view of applicant's amendments.

3. The rejection of Claim 2 under 35 USC 112, second paragraph is withdrawn in view of applicant's amendments.

4. Claims 1 and 2 stand rejected under 35 USC 102(b) as being anticipated by Hayashi et al. (US Patent 5529720).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al (US Patent 5529720).

Hayashi teaches ITO pigments and film forming compositions using these pigments (Abstract) to make transparent electrodes. Several examples of ITO pigments having x and y-values in the ranges of Claims 1 and 5 are disclosed e.g. Examples 10, 14 and 15. Examples also disclose pigment particle sizes in the nanometer size range (e.g. Example 1, primary particle size of 0.015 to 0.027 microns, Col. 14, line 47).

With respect to the yellow index limitations of Claim 1 and the resistance values of Claim 7, the examiner respectfully submits that these properties would be inherently met by the prior art compositions. Specifically, the prior art teaches identical components being produced in a similar manner and therefore would inherently possess the properties as required by Claims 1 and 7.

7. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishihara et al. (US Patent 5518810).

Nishihara teaches an ITO powder which can be distributed in a inorganic or organic binder wherein the binder can be a metal alkoxide. The ITO powder have x,y chromaticity values ranging from 0.220 to 0.295 for the x-values and 0.235 to 0.352 for the y-values (Abstract). Sizes of the ITO powders are preferably smaller then 0.1 micron (Column 4, line 52). Suggested uses of the ITO powders include transparent coatings and films (Column 10, lines 30-32).

With respect to the yellow index limitations of Claim 1 and the resistance values of Claim 7, the examiner respectfully submits that these properties would be inherently met by the prior art compositions. Specifically, the prior art teaches identical components being produced in a similar manner and therefore would inherently possess the properties as required by Claims 1 and 7.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Lee et al. (US Patent 6881357).

Hayashi is relied upon as disclosed above. However, Hayashi does not teach a coating layer comprised of ITO pigments wherein a second protective layer is present and where the protective layer is further made of a "hydrolysable Si alcholate" which examiner is construing as equivalent to a Si containing alkoxide.

Lee et al. teaches a transparent conductive layer for use in a image display device which is further comprised of a protective layer containing a a polymer of hydrolyzed silicon alkoxide and at least one mercapto compound (Abstract). The conductive layer is taught to be ITO (Column 9, line 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the protective layers taught by Lee with the ITO coatings of Hayashi since both patents are directed to the analogous art of transparent conductive coatings and Lee teaches the benefit of using said protective coatings in order to prevent conductive particles from experiencing corrosion due to ambient moisture while maintaining lower surface resistivity (Column 2, lines 59-65).

10. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihara in view of Lee et al. (US Patent 6881357).

Nishihara is relied upon as disclosed above. However, Nishihara does not teach a coating layer comprised of ITO pigments wherein a second protective layer is present and where the protective layer is further made of a "hydrolysable Si alcholate" which examiner is construing as equivalent to a Si containing alkoxide.

Lee et al. teaches a transparent conductive layer for use in a image display device which is further comprised of a protective layer containing a a polymer of hydrolyzed silicon alkoxide and at least one mercapto compound (Abstract). The conductive layer is taught to be ITO (Column 9, line 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the protective layers taught by Lee with the ITO coatings of Nishihara since both patents are directed to the analogous art of transparent conductive coatings and Lee teaches the benefit of using said protective coatings in

order to prevent conductive particles from experiencing corrosion due to ambient moisture while maintaining lower surface resistivity (Column 2, lines 59-65).

Nishihara is relied upon as disclosed above. However, Nishihara does not teach a coating layer comprised of ITO pigments wherein a second protective layer is present and where the protective layer is further made of a "hydrolysable Si alcholate" which examiner is construing as equivalent to a Si containing alkoxide.

Claim Rejections - 35 USC § 102/103

11. Claim 5 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hayashi et al (US Patent 5529720).

With respect to the product by process limitations of Claim 5, the examiner cites MPEP 2113 which states, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann,* 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art,

although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi,* 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

12. Claim 5 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishihara et al. (US Patent 5518810).

With respect to the product by process limitations of Claim 5, the examiner cites MPEP 2113 which states, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann,* 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and

the prior art product. *In re Marosi,* 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

Response to Arguments

13. Applicant's arguments filed 2/28/2007 have been fully considered but they are not persuasive.

Applicant argues that the ITO particles of the Hayashi reference teaches particles which have x,y chromaticity values lying outside of the claimed range in Claim 1 and therefore does not anticipated the instant claims.

The Examiner respectfully disagrees with Applicant's arguments. Examiner notes Example 10 of Hayashi wherein an non heat treated ITO pigment is created having an x-value of 0.3632 and a y-value of 0.3859 (Column 17, lines 22-61) which lies within the claimed range of x, y-values in Claim 1.

Allowable Subject Matter

14. Claims 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the art does not teach, suggest or motivate the creation of ITO particles which have the x and y chromaticity values specified by Claim 6.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas
Examiner
5/13/2007

JT

DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER

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